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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,230	09/30/2003	Frank Krickhahn	32860-000621/US	1587
30596 7590 03/12/2007 HARNES, DICKEY & PIERCE, P.L.C. P.O.BOX 8910 RESTON, VA 20195			EXAMINER JACKSON, JAKIEDA R	
			ART UNIT 2626	PAPER NUMBER

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/12/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/673,230	KRICKHAHN, FRANK	
	Examiner	Art Unit	
	Jakieda R. Jackson	2626	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

## DETAILED ACTION

### *Claim Objections*

1. The Specification and claims are objected to because the term "voice recognition" is misused for what nowadays is called --speech recognition-- in the speech signal processing art. While "voice recognition" and "speech recognition" were both once used interchangeably to refer to spoken word recognition, nowadays these two terms are distinguished. The term "voice recognition" now denotes identification of who is doing the speaking (class 704/246), while "speech recognition" (or word recognition) denotes identification of what is being said (class 704/251). So, appropriate correction to the proper terms of art is required (e.g. claims 1-2, etc. and page 4, paragraph 0017 of the specification).

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1-7, 10-12 and 16-20** are rejected under 35 U.S.C. 102(e) as being anticipated by Kominek et al. (PGPUB 2007/0050413), hereinafter referenced as Kominek.

Regarding **claims 1 and 16**, Kominek discloses a method and apparatus, hereinafter referenced as a method for rule-based conversion of unstructured text information into a structured format, comprising:

inputting structuring rules for structuring the unstructured text information (data structure; column 8, paragraph 0110 and column 9, paragraph 0120 with column 12, paragraph 0144);

recording unstructured text information (columns 7-8, paragraph 0104-0105 and column 12, paragraph 0144);

parsing the unstructured text information to produce relatively smaller text fragments (parse data; column 13, paragraph 0151-0156);

searching the unstructured text information for text fragments defined in the structuring rules (column 13, paragraph 0151-0156); and

structuring the text fragments of the unstructured text information on the basis of conditions stipulated in the structuring rules (column 13, paragraph 0151-0156).

Regarding **claims 2, 7 and 17**, Kominek discloses a method wherein the unstructured text information is recorded by a microphone (user interface), and wherein a voice recognition program is used for conversion to the unstructured text information (column 4, paragraph 0068).

Regarding **claims 3, 10 and 18**, Kominek discloses a method wherein the structuring rules include information relating to the text fragments for which a free text report needs to be searched (column 8, paragraph 0111 and column 9, paragraph 0113-0115).

Regarding **claims 4, 11 and 19**, Kominek discloses a method wherein the structuring rules include information relating to the text fragments about which structure element is represented thereby (column 13, paragraph 0151-0156).

Regarding **claims 5, 12 and 20**, Kominek discloses a method wherein the structuring rules include information about how the structure needs to be set up (inherent in created and organized; column 13, paragraphs 0151-0156).

Regarding **claim 6**, Kominek discloses a method for rule-based conversion of unstructured text information into a structured format, comprising:

- an input apparatus, adapted to input unstructured text information (data structure; column 8, paragraph 0110 and column 9, paragraph 0120 with column 12, paragraph 0144);

- an apparatus, adapted to structure rules (columns 7-8, paragraph 0104-0105 and column 12, paragraph 0144);

- an extraction apparatus, adapted to extract relatively smaller text units from the unstructured text information (parse data; column 13, paragraph 0151-0156);

- a structuring apparatus, adapted to produce structured text information on the basis of the structuring rules (column 13, paragraph 0151-0156); and

- an evaluation apparatus, adapted to evaluate the text units in the structured text information (column 13, paragraph 0151-0156).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 8-9 and 13-15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kominek in view of Hu et al. (PGPUB 2002/0143727).

Regarding **claims 8 and 13**, Kominek discloses a method for rule-based conversion of unstructured text information into structured format, but does not specifically teach wherein DICOM-SR is used as structured format for the structured text information.

Hu discloses a method wherein DICOM-SR is used as structured format for the structured text information (column 1, paragraph 0004 and columns 2-3, paragraph 0029-0031), to improve the expressiveness, precision, and compatibility of documentation of diagnostic images and waveforms.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kominek method wherein DICOM-SR is used as structured format for the structured text information, as taught by Hu, to provide significant new opportunities for large-scale collection of structured data clinical research, training, and outcomes assessment as a routine by product of diagnostic

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image and waveform interpretation, and facilitates the pooling of structured data for multi-center clinical trials and evaluations (column 1, paragraph 0004).

Regarding **claims 9 and 14-15**, Kominek discloses a method for rule-based conversion of unstructured text information into structured format, but does not specifically teach wherein XML is used as structured format for the structured text information.

Hu discloses a method wherein XML is used as structured format for the structured text information (column 1, paragraph 0007-0008 and columns 2-3, paragraph 0029-0031), to describe data and its structure so that it can easily transferred over a network and consistently processed by the receiver (column 1, paragraph 0007-0008) and to provide a different set of stylesheets that can be provided for watch format and thereby allowing the use of the same builder regardless of the particular output format (column 3, paragraph 0031).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kominek method wherein XML is used as structured format for the structured text information, as taught by Hu, to provide significant new opportunities for large-scale collection of structured data clinical research, training, and outcomes assessment as a routine by product of diagnostic image and waveform interpretation, and facilitates the pooling of structured data for multi-center clinical trials and evaluations (column 1, paragraph 0004).

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Marcu et al. (PGPUB 2004/0046018) disclose discourse parsing and summarization.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jakieda R. Jackson whose telephone number is 571.272.7619. The examiner can normally be reached on Monday through Friday from 7:30 a.m. to 5:00p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 571.272.7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.




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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JRJ

March 6, 2007

  
DAVID HUDSPETH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER